TO:

All Group Leaders Concerned

FROM:

J. R. Oppenheimer

SUBJECT: Trinity Test

FINAL DETERMIN TION (UNCLASSIFIED L. M. Redman)

There has been some confusion in the scheduling of Trinity. I feel myself responsible for this and should like to make clear in this statement what has contributed to the confusion and, as well as I know it, what the present situation is.

The original schedule for the Trinity shot, fixed early in March, was July 4, 1945. This was accepted by us as a target date. All our plans were made with the hope of completing the necessary development, test, etc., by that date. None of us felt convinced that the date could be met. Some seven weeks ago we were forced to reconsider the above schedule. The chief element in the reconsideration at that time was the great delay in the delivery of full scale lens molds and the consequent delay in development and production of full scale lenses. Since that time, some elements of uncertainty have apparently been removed from the program and others have entered it. In particular, the decision to work with the delta phase plutonium, taken primarily because of the added likelihood of an effective reaction, and in part because of metallurgical difficulties with the alpha phase, has made the schedule for active material quite tight. At the various meetings of Cowpuncher, we have made an effort to schedule these pacing components. The principal function of this has been to determine the time at which other components or other developments, which were not pacing, must be completed in order not to delay the accomplishment of the test. In this way, "carliest possible dates" ranging from July 20 to July 13 have been arrived at. The dates are not always the same, since technical developments like the arrival of more lens molds, casting successes, metallurgical difficulties or successes, may alter the estimates given at a particular meeting, of the length of time involved in a critical phase of the program.

It would, I believe, be the general agreement of Cowpuncher that the test could not, under any circumstances, be carried out before the 15th of July and that a date some ten days later is a not unreasonable probable dete. In reaching this conclusion we are influenced by the fact that we are under great pressure, both internal and external, to carry out this test, and that it undoubtedly will be carried out before all the experiments, tests, and improvements which should reasonably be made, can be made.

It is my feeling that schedules should be fixed so that a July 13 firing would not be precluded by the unreadiness of the component or equipment in question. On the one hand, this means that the treatment of such components or equipment will not be as satisfactory as on the basis of a later

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schedule; on the other hand, it reduces the likelihood of bottlenecks at present unforeseen, or of having things ready except for "a few days".

It is therefore my recommendation and my request that July 13 be taken as the earliest possible date in the sense outlined above, with the full understanding that this date may be early by as much as a week or two, and with the further understanding that an effort will be made to fix a more accurate date early enough so that the many groups involved can take advantage of any postponement of which we are certain.

J. R. Oppenheimer

